

Board of Education Agenda Item

Item: _____ H. _____

Date: _____ June 28, 2007 _____

Topic: First Review of Recommended Cut Scores for the Virginia Alternate Assessment Program

Presenter: Mrs. Shelley Loving-Ryder, Assistant Superintendent, Division of Assessment and Reporting

Telephone Number: (804) 225-2102

E-Mail Address: Shelley.Loving-Ryder@doe.virginia.gov

Origin:

_____ Topic presented for information only (no board action required)

Board review required by

_____ State or federal law or regulation

 x Board of Education regulation

_____ Other: _____

 x Action requested at this meeting _____ Action requested at future meeting: _____ (date)

Previous Review/Action:

 x No previous board review/action

_____ Previous review/action

date _____

action _____

Background Information:

The Virginia Alternate Assessment Program (VAAP) is intended to assess the achievement of students with significant cognitive disabilities who are unable to participate in the Standards of Learning (SOL) assessment program even with accommodations. A compilation of student work called a Collection of Evidence is prepared for students participating in the alternate assessment program. The VAAP, which is required by the federal *Individuals with Disabilities Education Improvement Act of 2004* (IDEIA), was first administered in the 2000-2001 school year. VAAP was revised for the 2006-2007 school year based on guidance received from the United States Department of Education as part of the peer review process required under the *No Child Left Behind Act of 2001*. The communication skills previously assessed in the VAAP were removed so that all submitted evidence is now based on the student's achievement of the Aligned Standards of Learning. In addition, Collections of Evidence must now include evidence from each reporting category within a test blueprint. Previously, two Aligned Standards of Learning were assessed without regard to reporting category coverage. Committees of Virginia educators were convened in early June to review selected Collections of Evidence from the spring 2007 administration and to recommend to the Board of Education the cut scores that should represent proficient and advanced performance for students in grades 3 through 5, 6 through 9, and 10 through 12 who are submitting Collections of Evidence in the areas of reading, mathematics, history/social sciences, and science for the VAAP.

Summary of Major Elements:

A range of recommended cut scores for the achievement levels of pass/proficient and pass/advanced for reading, mathematics, science, and history/social sciences for students in grades 3 through 5, 6 through 9, and 10 through 12 will be presented to the Board.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board waive first review and adopt cut scores for the achievement levels of pass/proficient and pass/advanced for reading, mathematics, science, and history/social sciences for the students in grades 3 through 5, 6 through 9, and 10 through 12 so that Adequate Yearly Progress without delay.

Impact on Resources:

N/A

Timetable for Further Review/Action:

The Board should periodically review the cut scores for the Virginia Alternate Assessment Program.

DRAFT

**Virginia Alternate Assessment Program
Standard Setting
June 2007**

Psychometric Services
Pearson Educational Measurement

Executive Summary

On June 4-8, 31 educators from the Commonwealth of Virginia met in Richmond, VA to set standards for the Virginia Alternate Assessment Program (VAAP). Staff from Pearson Educational Measurement (PEM) provided training and assistance in the effort, using a modified Body of Work standard setting procedure.

Standard setting panelists were divided into three groups based on grade bands: grades 3-5 (nine panelists), grades 6-8 (twelve panelists), and high school (ten panelists). The demographics of the panelists are presented in Table ES1.

Table ES1

Demographics of the Panelists

Gender		Gender		Region		Number of Students in School		Location of School		Typical SES of Students	
Male	6%	White	90%	1	24%	1-325	0%	Rural	39%	Low	3%
Female	94%	Black	6%	2	21%	326-450	17%	Suburban	52%	Lower Middle	42%
		Am.Ind	3%	3	3%	451-550	10%	Urban	10%	Middle	39%
				4	14%	551-750	13%			Upper Middle	16%
				5	24%	> 750	60%			Upper	0%
				6	3%						
				7	10%						
				8	0%						

All three groups participated in a joint general session that covered an introduction to the modified Body of Work procedure, the VAAP, and the performance level descriptors to be used throughout the process. After discussion of the performance level descriptors, the panelists broke into their respective grade bands so that review of the collections of evidence (COE) could begin. They reviewed the COE during Round 1 and rated each COE as “Needs Improvement/Failure”, “Proficient”, or “Advanced” (range-finding). Following discussion of Round 1 results showing individual and group level cut score information and a tabulation of the ratings given to the set of COE, panelists reviewed only those COE that were in disagreement more than 67% of the time (pinpointing). Following discussion of the Round 2 results and, the panelist made their final recommendations as to what the score cut should be in Round 3. After Round 3, three members were selected from each of the grade band committees to serve on a Vertical Moderation committee.

The cut score information resulting from Round 3 of the standard setting process for both the Proficient and Advanced cuts is summarized in tables ES2-ES7. The range of

possible score points differed by subject area (Reading, 8 points; History and Science, 16 points; and Mathematics, 20 points). Table ES7 and Figure ES1 show the percentage of total possible points required to reach each cut represented by the Round 3 recommendations.

Table ES2

**Grade Band 3-5 PROFICIENT
Cut Score Information**

	Reading	History	Mathematics	Science
Range	3-4	8-9	10-12	9-10
Mean	3.7	8.9	10.7	9.2
SD	0.50	0.33	0.71	0.44
SE _{Mean}	0.17	0.11	0.24	0.15
Median	4.0	9.0	11.0	9.0
SE _{Median}	0.21	0.14	0.30	0.19
IQR	1.0	0.0	1.0	0.5

Table ES3

**Grade Band 3-5 ADVANCED
Cut Score Information**

	Reading	History*	Mathematics	Science
Range	6-7	13-14	15-17	13-14
Mean	6.3	13.7	15.3	13.1
SD	0.50	0.50	0.71	0.33
SE _{Mean}	0.17	0.17	0.24	0.11
Median	6.0	14.0	15.0	13
SE _{Median}	0.21	0.21	0.30	.14
IQR	1.0	1.0	0.5	0

* The Vertical Articulation committee recommended a change to this cut.

Table ES4
Grade Band 6-8 PROFICIENT
Cut Score Information

	Reading	History*^	Mathematics*	Science*
Range	3-5	7-8	8-12	8-9
Mean	3.7	7.8	10.1	8.3
SD	0.65	0.45	1.16	0.45
SE _{Mean}	0.19	0.13	0.34	0.13
Median	4.0	8.0	10.0	8
SE _{Median}	0.24	0.16	0.43	0.16
IQR	1.0	1.0	2.0	0

* The Vertical Articulation committee recommended a change to this cut. ^ The rules of articulation did not allow for the committee to change this cut.

Table ES5
Grade Band 6-8 ADVANCED
Cut Score Information

	Reading	History	Mathematics	Science*
Range	6-7	11-13	12-16	11-13
Mean	6.4	12.4	14.8	12.3
SD	0.51	0.67	1.48	0.62
SE _{Mean}	0.15	0.19	0.43	0.18
Median	6.0	12.5	15.0	12
SE _{Median}	0.19	0.24	0.54	0.23
IQR	1.0	1.0	2.0	1.0

* The Vertical Articulation committee recommended a change to this cut.

Table ES6
Grade Band HS PROFICIENT
Cut Score Information

	Reading	History	Mathematics*	Science
Range	4-4	8-10	10-12	8-10
Mean	4.0	9.1	11.6	9.2
SD	0.00	0.57	0.70	0.79
SE _{Mean}	0.00	0.18	0.22	0.25
Median	4.0	9.0	12.0	9
SE _{Median}	0.000	0.23	0.28	0.31
IQR	0.0	0.5	1.0	1.5

* The Vertical Articulation committee recommended a change to this cut.

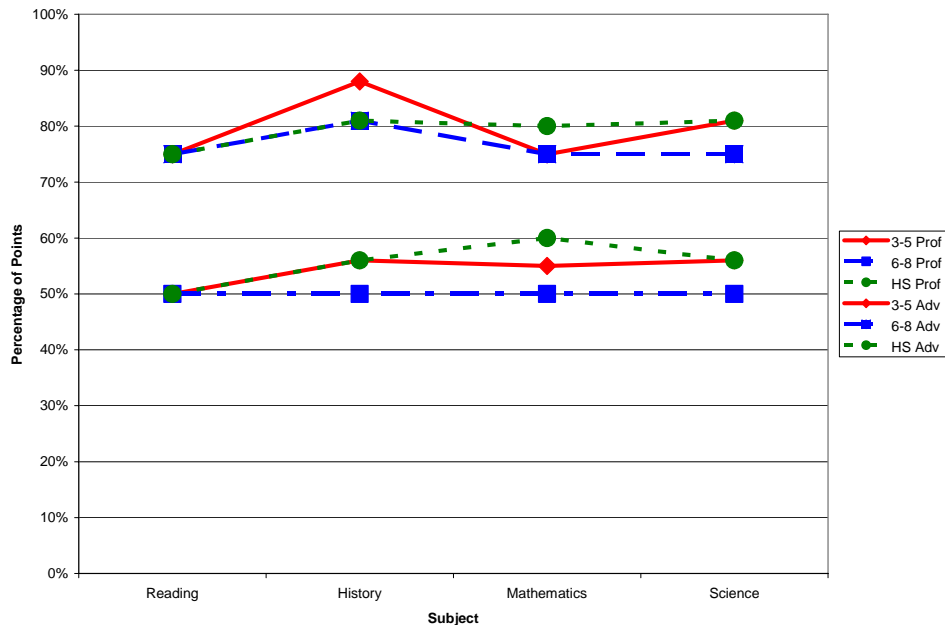
Table ES7
Grade Band HS ADVANCED
Cut Score Information

	Reading	History	Mathematics	Science
Range	6-6	12-14	16-17	11-14
Mean	6.0	13.3	16.1	12.7
SD	0.00	0.67	0.32	0.82
SE _{Mean}	0.00	0.21	0.10	0.26
Median	6.0	13.0	16.0	13
SE _{Median}	0.000	0.26	0.13	.33
IQR	0.0	1.0	0.0	1.0

Table ES8
Percentage of Points Required to Achieve Each Proficiency Level

Band	Reading	History	Mathematics	Science
3-5 Prof	50%	56%	55%	56%
6-8 Prof	50%	50%	50%	50%
HS Prof	50%	56%	60%	56%
3-5 Adv	75%	88%	75%	81%
6-8 Adv	75%	81%	75%	75%
HS Adv	75%	81%	80%	81%

Figure ES1
Percentage of Points Required to Achieve Each Proficiency Level



On the final day of the standard setting, a smaller vertical moderation committee of nine panelists reviewed the results in terms of each subject as a whole across grade bands. All the Round 3 recommendations and summarizing data were presented to the vertical moderation committee. The demographics of the vertical articulation panel are presented in Table ES9.

Table ES9

Demographics of the Panelists

Original Grade Span	Gender		Ethnicity	
	Male	Female	White	Black
3-5	1	2	2	1
6-8		3	2	1
HS		3	2	1

This committee was tasked with reviewing the cuts established by each individual grade band within a subject and making any final recommendations to adjust the Round 3 cuts so that academic rigor was consistent across grades within a subject and that the cuts were reasonable given the population assessed. The vertical moderation committee was not allowed to make any recommendations outside the ranges already established in Round 3 by the individual grade-span groups. Following discussion of each subject area and the associated cuts, the committee voted on whether or not to change any of the cuts. If a majority voted to change a cut, then discussion occurred and a second round of voting was done to establish the new cut.

The vertical moderation committee accepted all Round 3 recommendations with the exception of the following:

- Grade 3-5 History Advanced cut
- Grade 6-8 Science Proficient cut
- Grade 6-8 History Proficient cut (see note below)
- Grade 6-8 Mathematics Proficient
- Grade 6-8 Science Advanced
- High school Mathematics Proficient cut.

With these recommendations, the vertical articulation committee recommended matching these cuts to the other two grade spans' cuts so that consistent academic rigor was being applied across all grade spans. NOTE: The vertical articulation committee voted to change the 6-8 History Proficient cut to match the 3-5 and high school cuts, but the rules of articulation did not allow the cut to move beyond the range established during the 6-8 History round 3 deliberations. The vertical articulation committee recommends that the State Board adjust this cut to match the other grade spans' cuts.

Tables ES10 and ES11 and Figure ES2 show the results following the changes recommended by the vertical articulation committee.

Table ES10
Number of Points Needed to Achieve Each Proficiency Level

Band	Reading	History	Mathematics	Science
3-5 Prof	4	9	11	9
6-8 Prof	4	8*	11	9
HS Prof	4	9	11	9
3-5 Adv	6	13	15	13
6-8 Adv	6	13	15	13
HS Adv	6	13	16	13

* The vertical articulation committee voted to change this cut to 9, but the rules prohibited formalizing the change.

Table ES11
Percentage of Points Required to Achieve Each Proficiency Level

Band	Reading	History	Mathematics	Science
3-5 Prof	50%	56%	55%	56%
6-8 Prof	50%	50%	55%	56%
HS Prof	50%	56%	55%	56%
3-5 Adv	75%	81%	75%	81%
6-8 Adv	75%	81%	75%	81%
HS Adv	75%	81%	80%	81%

Figure ES2
Percentage of Points Required to Achieve Each Proficiency Level

